

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)


(PCT Article 36 and Rule 70)

PCT/JP2005/005641

REC'D 15 FEB 2006

WIPO

PCT

Applicant's or agent's file reference SDF-5315PCT	<b>FOR FURTHER ACTION</b>		See Form PCT/PEA416
International application No. PCT/JP2005/005641	International filing date (day/month/year) 22.03.2005	Priority date (day/month/year) 24.03.2004	
International Patent Classification (IPC) or national classification and IPC A61K748			
Applicant SHOWA DENKO K.K. et al.			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
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Date of submission of the demand  17.11.2005		Date of completion of this report  14.02.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tlx 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Nopper-Jaunky, A Telephone No. +49 89 2399-	



# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.  
PCT/JP2005/005641

## Box No. 1 Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:

- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

### Description, Pages

1-40 as originally filed

### Claims, Numbers

1-12 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

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- ☐ the sequence listing (*specify*):
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**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/JP2005/005641

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**Box No. VI Certain documents cited**

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1. Certain published documents (Rule 70.10)  
and / or
2. Non-written disclosures (Rule 70.9)  
see separate sheet

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**Box No. VII Certain defects in the international application**

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The following defects in the form or contents of the international application have been noted:  
see separate sheet

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/JP2005/005641

**Re Item I****Basis of the report**

Reference is made to the following document:

D1: WO 2005/020950 A (SHOWA DENKO K.K; YONEDA, TADASHI) 10 March 2005  
(2005-03-10)

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

**Novelty (art. 33(1) and (2) PCT):**

None of the cited documents in the ISR discloses the claimed oil-in-water emulsion.  
Therefore, claims 1-12 are novel.

**Inventive step (art. 33(1) and (3) PCT):**

The problem to be solved by the present invention can be regarded as providing stable oil-in-water emulsions comprising a lipopeptide without using synthetic water soluble polymer or non ionic surfactant.

The solution proposed by the Applicant is an oil-in-water emulsified composition comprising from 0.1-5% by mass of a lipopeptide, 0.05-1.5% of xanthan gum, an oil component and water.

In his comparative tests the Applicant has shown that the presence of 0.05-1.5% xanthan gum in oil-in-water emulsions comprising sodium surfactin enhances the storage stability of said emulsions. This effect is neither disclosed nor suggested by the cited prior documents in the ISR. Therefore, claims 1-12 involve an inventive merit.

**Industrial applicability (art. 33(1) and (4) PCT):**

Can be acknowledged for claims 1-12.

**INTERNATIONAL PRELIMINARY  
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(SEPARATE SHEET)**

International application No.

**PCT/JP2005/005641****Re Item VI****Certain documents cited****Certain published documents**

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
WO2005/020950 (D1)	10.03.2005	26.08.2004	28.08.2003 03.09.2003

D1, as filed on 26.08.2004 and published on 10.03.2005 and claiming priority rights on 28.08.2003 and 03.09.2003 is not considered as prior art according to the Chap. II PCT Proceedings. However, the extensive examination of that document, on the question whether it constitutes prior art for the examination of the novelty and the inventiveness, will essentially depend on the analysis of the claimed priority rights of the present application and will only be performed in the Regional European Proceedings to come.

**Re Item VIII****Certain observations on the international application**

The references to the prior art documents JP-A-2003-12445 and JP-A-2003-95853 cited in the description on page 2 and 7 have to be replaced by JP-A-2003-012445 and JP-A-2003-095853.

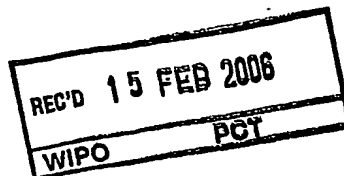
## PATENT COOPERATION TREATY


## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



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International application No. PCT/JP2005/005641	International filing date (day/month/year) 22.03.2005	Priority date (day/month/year) 24.03.2004	
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**INTERNATIONAL PRELIMINARY REPORT  
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International application No.  
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**Box No. I Basis of the report**

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**Description, Pages**

1-40 as originally filed

**Claims, Numbers**

1-12 as originally filed

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3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
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**Box No. VI Certain documents cited**

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1. Certain published documents (Rule 70.10)  
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see separate sheet

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**Box No. VII Certain defects in the international application**

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**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
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**Novelty (art. 33(1) and (2) PCT):**

None of the cited documents in the ISR discloses the claimed oil-in-water emulsion.  
Therefore, claims 1-12 are novel.

**Inventive step (art. 33(1) and (3) PCT):**

The problem to be solved by the present invention can be regarded as providing stable oil-in-water emulsions comprising a lipopeptide without using synthetic water soluble polymer or non ionic surfactant.

The solution proposed by the Applicant is an oil-in-water emulsified composition comprising from 0.1-5% by mass of a lipopeptide, 0.05-1.5% of xanthan gum, an oil component and water.

In his comparative tests the Applicant has shown that the presence of 0.05-1.5% xanthan gum in oil-in-water emulsions comprising sodium surfactin enhances the storage stability of said emulsions. This effect is neither disclosed nor suggested by the cited prior documents in the ISR. Therefore, claims 1-12 involve an inventive merit.

**Industrial applicability (art. 33(1) and (4) PCT):**

Can be acknowledged for claims 1-12.

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